FERGUSON
SYNSTONE
(SYNTHETIC STONE)
SYSTEM

If you can build a better wall at a lower price than anyone else, the building world in your territory will soon find the way to your door.

PERCUSSION

SYNSTONE

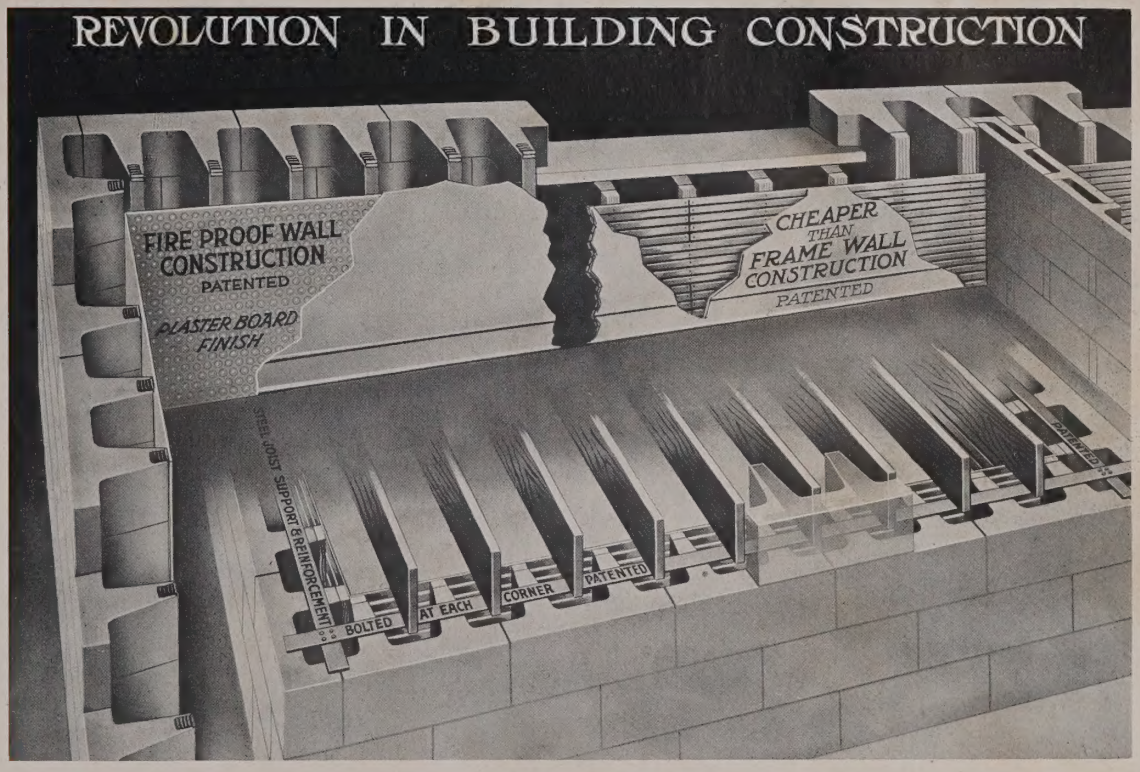
(SYNTHETIC STONE)

SYSTEM

SYNSTONE

(SYNTHETIC STONE)

SYSTEM



The above illustration shows Synstone Single Wall Construction. Either metal or wood lath or plaster-board is applied to furring strips, secured to the nailing plugs between the lugs of the blocks. This leaves a ventilated air space—a valuable feature in Synstone Wall Construction. Air can circulate vertically and horizontally. Insures absolute sanitation, dry walls and thorough insulation. At extreme right of illustration Synstone Partition Construction is shown. No lathing is necessary here. The plaster is applied directly to the partition.

The Ferguson Synstone Co.

General Offices, Century Building

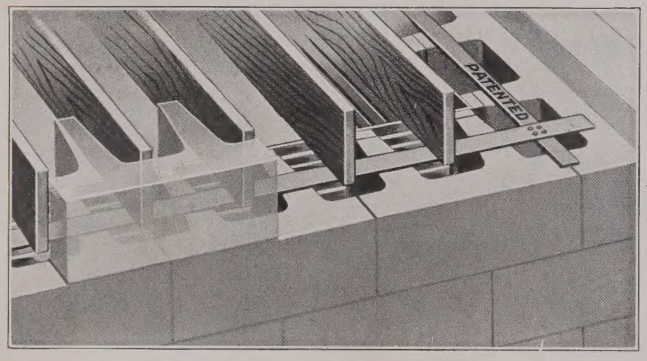
Denver, Colorado, U. S. A.

A System of Hollow Concrete Wall Construction That Costs No More Than Frame Buildings

Synstone Single Walls

THE Synstone Single Wall is the result of several years experiments and careful thought, behind which has been an earnest desire to produce a home at no greater cost than frame construction. This has now been accomplished and put upon the market within the reach of the small contractor or builder, as well as those in a large way of business and the individual who wishes to use this construction.

The Synstone Single Wall Construction means—*a concrete home with hollow walls at no greater cost than an ordinary frame house, the exterior of which may be faced with beautiful granite, white marble, sandstone or other natural materials.*



Section showing Synstone System of building walls tied together with steel band and joist support at each floor course, imbedded in cement mortar and bolted at the four corners of the building.

SYNSTONE Single Wall Construction has advantages over everything heretofore produced. It is in effect a half wall, using about one-half as much material, less than one-half as much labor both in making and laying per square foot than any concrete wall that has ever been devised. Our 9-inch single wall is stronger than a 12-inch brick wall, and may be loaded up to building ordinance requirements for a 16-inch brick wall. It is practically everlasting, fire-proof and free from need of repairs—cool in summer and warm in winter, saving 33⅓ on coal bills. It is cheaper by far than any other form of construction excepting frame. And despite its superiorities and beauty, costs no more than frame.

Synstone is composed of large aggregate stone in the following mixture in units 12 by 24 inches, making 2 square feet of wall per block:

MIXTURE TO BE SOGGY WET

1 part Portland Cement.

2½ parts of sharp sand and small gravel or broken stone.

4 parts of broken stone at least one inch in size.

7% (weight of cement) hydrated lime.

Use of large aggregate reduces the cost of the blocks and strengthens them. The reason is this: the larger the individual pieces, the less the cement required to bind them together into an inseparable unit.

Cement is costly and our system saves a large amount of it.

For example, much cement would be required to coat all the grains of sand necessary to compose a stone one inch in diameter. All this cement is saved by starting with inch aggregate. This leaves merely the surface of the inch stone to be coated. Nature has already bound the interior. And in the mixture of which Synstone is composed, nearly one-half is stone or gravel one inch in size.

This means that over one-half of the Synstone mixture is already stone when the block is begun.

Where art facings are desired only ¼ inch of facing material is used in a mixture of 1 part cement and 3 parts of crushed natural stone or marble.

This row of residences (a portion of the Model City of Morgan Park, Minn.) is all made of the unfaced Synstone 8-inch single wall construction. Important improvements have been made in machinery and facing since these were constructed.

Mixture and Walls

THE Synstone mixture must be made so wet that it quakes in the mold when slightly tamped. Dry or semi-dry mixtures **MUST NOT** be used. Under the Synstone method all voids or crevices in the block are filled solid. This makes a solid, inseparable stone as dense and impervious as granite.

While blocks must be made of a wet mixture they must also be made speedily. **THE SYNSTONE METHOD SOLVES THE SPEED PROBLEM**, and Synstone has been made practical for widespread use. **AN UNFACED BLOCK IS MADE IN 1¼ MINUTES. A FACED BLOCK IN LESS THAN TWO MINUTES.**

The shape of the block is such that it will stand up when immediately removed from the machine. It does not have to be left there to harden. Synstone blocks can be stacked to the side as rapidly as taken from the machine. In two weeks they will be as hard as nature-made stone and ready for the wall.

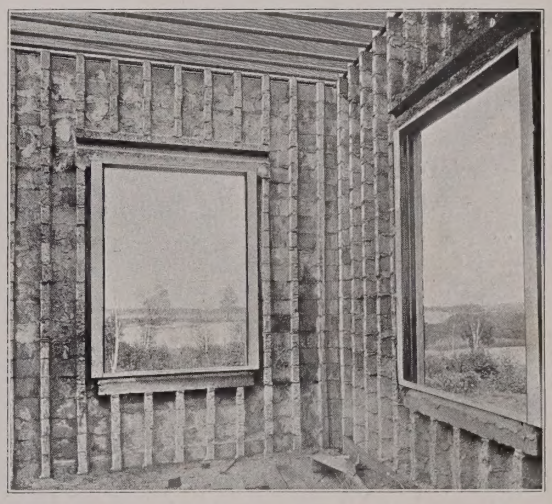
This block is also the correct shape and dimension to give the best wall size and the utmost structural strength. Its strength is almost beyond belief. **THREE THOUSAND POUNDS PER SQUARE INCH MAY BE APPLIED WITHOUT FRACTURING A BLOCK OF SYNSTONE AND 1,700 DEGREES OF HEAT MAY BE APPLIED FOR ONE HOUR WITHOUT INJURY.**

Synstone blocks can be made for either 9-inch or 13-inch hollow single wall with the Synstone machine. Nine inches are sufficient for any three-story ordinary construction. Thirteen can be used wherever the local building regulations require it, until such regulations are changed to permit the use of a nine-inch wall.

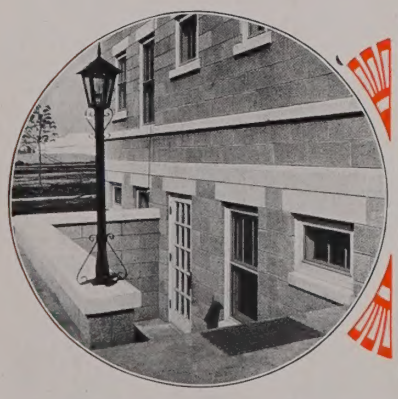
ANY OTHER THICKNESS OF WALL DESIRED IS PRODUCED ON SYNSTONE MACHINERY BY SIMPLY CHANGING THE CORES, WHICH IS DONE IN THIRTY SECONDS.

Double Wall, 11½″ to 18″ thick. See page 10.
Multiple Air Space Wall, 19½″ to 120″ thick. See page 10.
Synstone Wall, Brick Veneer, 12½″ or 16½″ thick. Page 9.
Double Header Bond Wall, 3¼″ to 12″ thick. Page 10.
Double Partition Wall, 4¼″ to 11″ thick. See page 10.

Residence, Synstone single 9-inch wall construction, faced with granite.



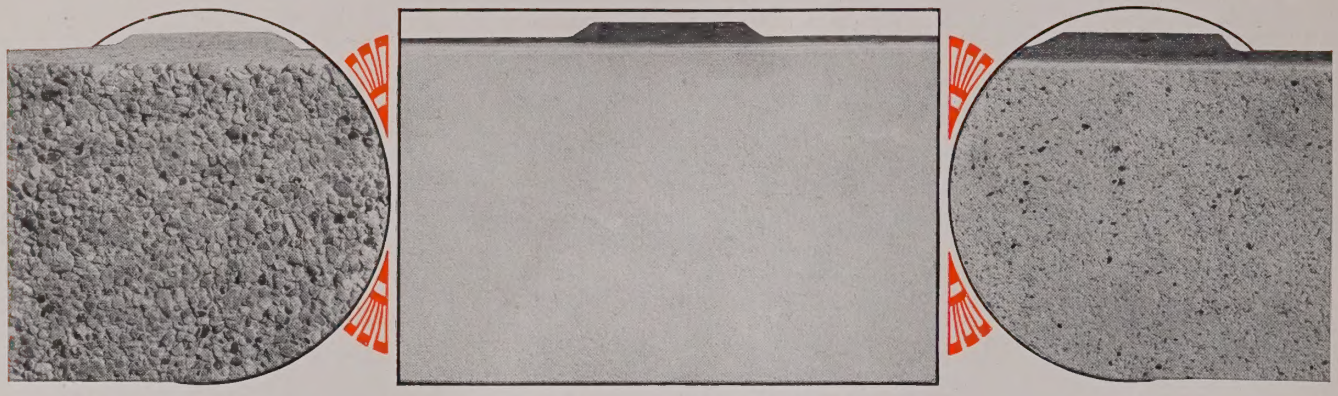
Interior construction, before furring and plastering, showing interior of Synstone single 9-inch wall construction.



Synstone single wall construction. Granite facing—Detailed view.

Synstone single 9-inch wall residence construction. Faced with white granite.

Detailed view. Synstone single 9-inch wall construction. Granite-faced.



Faced with common gravel.

FACED SYNSTONE BLOCKS—CUTS MADE FROM PHOTOGRAPHS.
Faced with marble.

Faced with granite.

The Matchless Beauty of Synstone Facing

THIS new method enables anyone to produce a block with the facing of granite, marble, Bedford sandstone, red sandstone, and other art facings, that defy detection by any but experts.

The costliest, the most attractive effects, can be reproduced in Synstone at the trifling additional cost of 1¼c per square foot of wall.

Under the Synstone method the blocks are made face down in the machine. The facing matter, one-quarter inch in thickness (or facing material applied to glued paper), is placed in the machine on the pallet. The coarse mixture is placed on top of it and tamped. This makes the facing an integral part of the stone itself. The two are inseparable. They cannot crack, spall, chip or weather off.

If Synstone marble, granite, or sandstone were laid in a wall with natural granite, marble or Bedford stone, experts would be required to distinguish the nature-made stone from the man-made stone.

WHITE MARBLE facing is produced by using a mixture of marble dust and white cement.

WHITE GRANITE—Use crushed granite or feldspar, mica and white cement, producing a sparkling white granite.

GRAY GRANITE—Use crushed granite and Portland cement.

RED GRANITE—Use red granite and Portland cement.

BROWN GRANITE—Same mixture and brown granite.

BEDFORD SANDSTONE — Fine sand and Portland cement.

WHITE SANDSTONE—White sand and white cement.

RED SANDSTONE—Red sand, or sand and red iron pigment color, and Portland cement.

UNFACED BLOCKS—Where sand and gravel are used instead of broken stone in a mixture of 1, 2½ and 4 (inch screen) a beautiful exterior is produced (because of light and shade effect) that many architects prefer to any other facing.

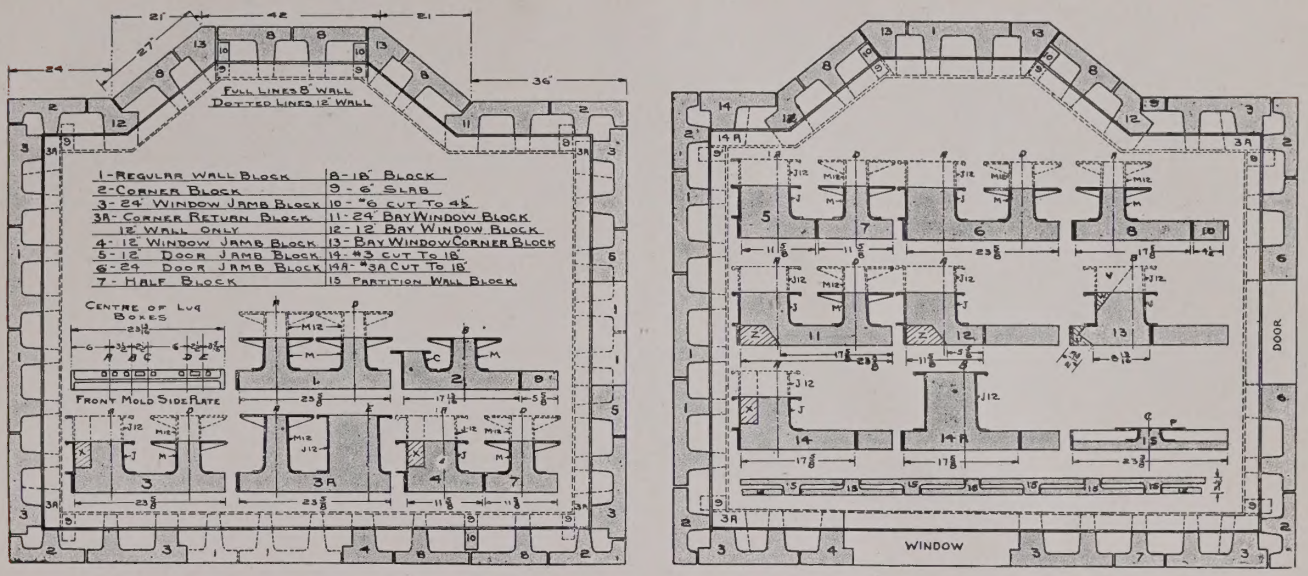
In all of these facings, when the block is about 24 hours old, it is turned on edge and the face is lightly washed with a fiber brush and water (requiring about one minute's time), thus removing the cement from the face. The result is marvelous and an exact reproduction of natural stone.

Rear View.

Synstone Blocks, Unfaced.

Front View.

The Bonding of the 9" and 13" Single Wall



Showing different blocks used in the construction of the Synstone Single Wall System.

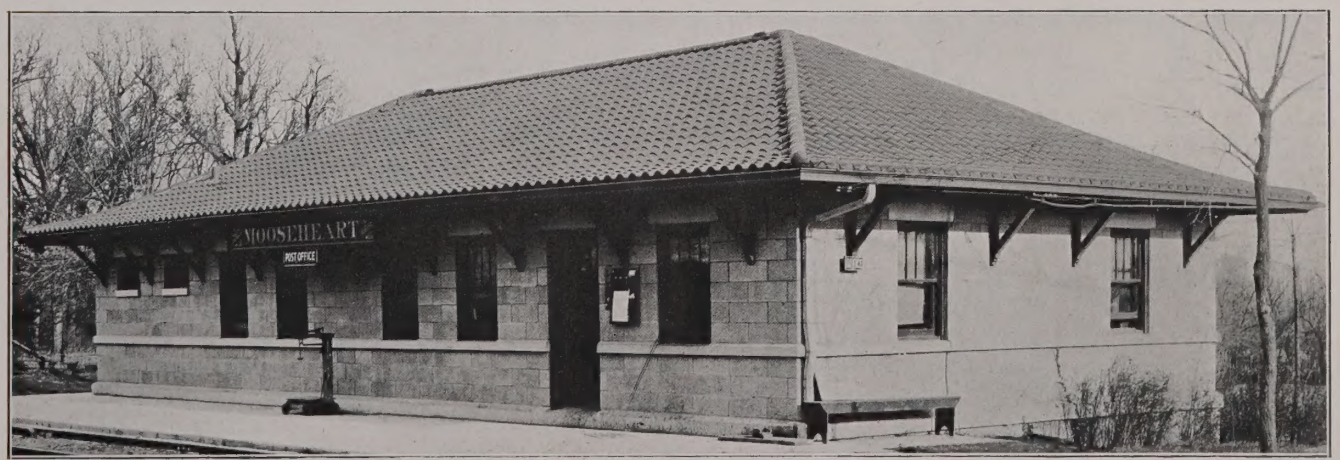
The two wall illustrations show alternate courses in a residence and the manner in which the blocks bond over each other in every case. In the center of the wall illustrations are shown the blocks necessary for residence construction and the manner in which they are made in the Synstone machine. The solid lines indicate the 8-inch wall—the dotted lines the 12-inch wall.

■ ■ ■ ■

Construction Suitable for the Single Walls

Residences Stores Churches School Buildings Garages Silos
Dairy Houses Barns Out-Buildings Warehouses Factories
Railway Stations Round Houses Freight Houses

Fire-proof floors, roofs and partitions may be used with this construction where desirable. In ordinary construction up to three stories in height no reinforcement is necessary other than the ⅜" steel joist support laid in the mortar joint, which not only supports the joists and rafters, but ties the building together in a way that makes it practically indestructible. Where heavy loads are to be carried, or for buildings of greater height than three stories, **OUR DOUBLE WALLS** may be used and when necessary reinforced concrete piers may be formed by filling one or more of the air chambers with concrete and steel rods.



Chicago, Burlington and Quincy Railroad Station. Granite-faced Synstone, Eight-inch Walls.

An entire city built of unfaced Synstone, the Model City of Morgan Park, Minn., constructed by the Minnesota Steel Company, a subsidiary of the United State Steel Corporation. All house walls constructed of 8-inch Synstone, unfaced. About 1,000,000 square feet of Synstone blocks were laid in building these residence

Tests That Prove All Points Conclu

MR. FERGUSON invented this Synstone wall more than three years ago, but refused to put the system on the market until it was perfected and thoroughly tested in actual use.

The first test was building two 1½-story-and-basement residences of a six-inch wall, when in brick the building ordinance would require 16 inches for basement, 12 inches for first story and 8 inches for second story.

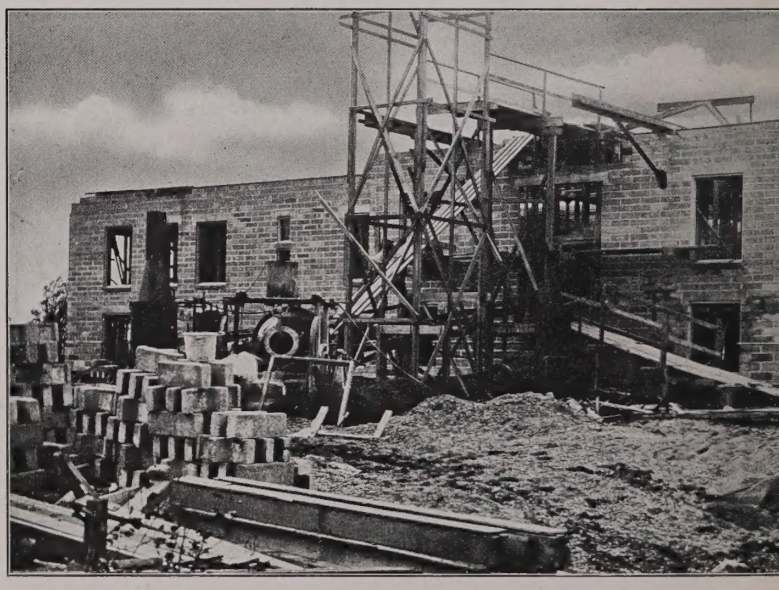
The result far exceeded expectations. The strength and rigidity of this 6″ wall was greater than 12″ brick wall specifications would call for.

The final test of the Synstone was made by the Minnesota Steel Company of Duluth (subsidiary of the United States Steel Corporation).

The engineers of this great company thoroughly tested Synstone wall and gave it their full approval. The result was its complete adoption by the Steel Company for the construction of their entire model city of Morgan Park, Minn. (See illustration.)

The machinery since invented and the new simple method of art facing was not available for this construction. The heavy pressure machinery referred to on page 11 (all patents on which Mr. Ferguson owned and controlled) was used in this construction. The walls of the buildings in the Steel Company's model city were unfaced and the cement on the face was not washed off, notwithstanding, the appearance of these buildings is most satisfactory.

The strength and rigidity was found to be so great that the company decided to construct their ***office building, laboratory and stores of the Synstone Wall, 8 inches thick.*** In the office building and laboratory these walls ***support fire-***



OFFICE BUILDING, Minnesota Steel Company, Model City, Morgan Park, Minn. roof carried on thes

350 families and office building, laboratory, stores, etc. A mason and helpers laid an average of 150 blocks per day on walls containing doors and openings. straight wall construction, where no openings were met, an average of 400 blocks per day were laid. This is equivalent to laying 12,000 bricks per day.

y—An Entire City Built of Synstone

roof concrete floors and roof slabs and are not reinforced in any way.

The Steel Company, instead of using wood ath for the inside of the wall, used fire-proof plaster-board, which requires less plaster than wood lath, and is, in consequence, but slightly more expensive. (See cut of wall construction.)

0% hollow construction throughout, EIGHT INCHES THICK. Concrete floors and reinforcement.

Since these practical tests of Synstone, Mr. Ferguson has invented and perfected the present Synstone machine. The block it produces, the speed and ease with which it is operated, far excel any other method of block construction, permitting, as it does, the use of a very wet mixture of coarse aggregates.

Synstone buildings are tied together with steel that makes them more nearly cyclone and earthquake-proof than a brick or natural stone building, because this steel binding member, occurring at each floor course and at the roof course, is bedded in cement-mortar and bolted together at the four corners of the building. As every block in the building is laid in cement-mortar, the whole becomes a monolith and is practically indestructible.

These steel binding members are laid over the lugs of the blocks and the floor joists rest upon them, so that in non-fire-proof construction if the floors or roof burn they fall in and the walls are not injured and the damaged parts may be at once replaced.

This steel binding member and joist support which can be used only in the Synstone single wall, costing, as it does, but a trifle for a building, is one of the most valuable inventions that has ever been made in building construction.

The Cost of Synstone Single Wall

SYNSTONE, composed, as it is, of 1 part cement, 2½ parts sharp sand and small gravel, and 4 parts of crushed rock or gravel to 1 inch screen, will vary in cost of manufacture, as well as erection (because of different prices of labor and material) in various parts of the country. The following rules are given to enable a quick computation of manufacturing and erection costs when the prices for a given territory are used. These rules are absolutely conservative and trustworthy.

Manufacture

Two experienced men can easily manufacture fifty Synstone blocks per hour (100 square feet), but to cover average output and lack of efficiency in some plants 40 blocks (80 square feet) are used as the basis for the following rule. This output is based on mixture being supplied.

COST PER SQUARE FOOT OF SYNSTONE

Add the following items:

Multiply	Average price outside large cities	
4.4 x cost of sack of cement @ 40c* sack		$1.76
.4 x cost of a yard of sand @ $1.00* cu. yd		.40
.65 x cost of rock or gravel @ $1.00* cu. yd		.65
Cost of man and helper @ 47c* per hr		.47
Cost of man for mixing @ 23c* per hr		.23
Total		$3.51

*Substitute your local costs.

Divide this total by 80 (sq. ft.) and the result is 4 $\frac{4}{10}$ cents per square foot to manufacture Synstone.

Erection

Three men will lay 250 blocks per eight-hour day on straight wall with few openings or 100 blocks per eight-hour day where there are many corners and openings.

A fair average under general conditions is 120 blocks per day of eight hours, or 15 blocks (30 sq. ft.) per hour. There is a ⅜-inch mortar joint.

Mortar consists of:

1 part cement.
3 parts sand.
7% hydrated lime (based on the weight of cement).

The cost per square foot to LAY Synstone blocks is found by the following rule:

Add the following items:

Total cost of labor per hour—mason, 50c*; helper, 30c*, and laborer, 25c*	$1.05
.158 x cost of 1 cu. ft. cement @ 40c*	.06
.63 cubic feet of sand @ $1.00* per yard	.025
1 lb. hydrated lime @ $12.00 per ton	.006
Cost of delivery 15 blocks @ 2½c* each	.37
Furring @ 2c* per sq. ft.	.60
Total	$2.111

*Substitute your local costs.

Which, divided by 30 (sq. ft.) equals 7 cents per square foot for the total erection cost of Synstone.

THE TOTAL COST TO MAKE AND LAY SYNSTONE, WITHOUT PROFIT, IS 11 $\frac{4}{10}$ CENTS PER SQUARE FOOT OF WALL; ADD 1¼ CENTS PER SQUARE FOOT EXTRA FOR FACING; TOTAL..... 12 $\frac{6}{10}$ CENTS

SUMMARY

Including 100% Profit to Manufacturer and 20% Profit to Contractor

The manufacturer of Synstone will, as a rule, erect the Synstone building; but if he sells the blocks to a contractor who in turn will erect them into the building, the manufacturer doubles his manufacturing cost, which gives him the selling price.

The contractor usually adds 20% profit to his cost of labor, material and erection.

The cost of Synstone to the home builder, in localities where prices range as given above, will be:

Manufacturer's net cost of blocks	$ .044	per sq. ft.
He adds 100% profit	.044	per sq. ft.
Cost to the contractor	$ .088	per sq. ft.
Erection cost, including furring	.07	per sq. ft.
Contractor's 20% profit on total cost	.031	per sq. ft.
Total cost of unfaced Synstone to home builder	$ .189	per sq. ft.
Add for faced Synstone	.01¼	per sq. ft.
Total cost of faced Single Synstone wall to home builder (erected)	$ .201	per sq. ft.

Table of Cost Comparisons

Single Synstone Walls with various types of building construction, including both 100% profit to the block manufacturer and 20% profit to contractor on all materials.

Unfaced Synstone, Single Wall

Frame Walls, painted, cost about the same.
Common 8-inch Brick Walls cost 10% more.
8-inch Brick Walls faced with $17 per M. brick cost 100% more.
8-inch Brick Walls faced with $20 per M. brick cost 125% more.
8-inch Brick Walls faced with $40 per M. brick cost 260% more.
8-inch Brick Walls faced Bedford Stone Veneer cost 145% more.
8-inch Brick Walls faced White Marble Veneer cost 350% more.
Hollow Tile Walls with three coats of Stucco cost 60% more.

Faced Synstone, Single Wall

Costs about 5% more than Frame Walls, painted.
Common 8-inch Brick Walls cost 5% more than Faced Synstone.
8-inch Brick Walls faced with $17 per M. brick cost 80% more.
8-inch Brick Walls faced with $20 per M. brick cost 100% more.
8-inch Brick Walls faced with $40 per M. brick cost 225% more.
8-inch Brick Walls faced Bedford Stone Veneer cost 120% more.
8-inch Brick Walls faced White Marble Veneer cost 300% more.
Hollow Tile Walls with three coats of Stucco cost 50% more.

In making a 12-inch wall the amount of concrete material used will be increased about 20%.

The Cost of Synstone (Concluded)

A COMPARISON OF MANUFACTURING COST

SYNSTONE vs. HOLLOW CEMENT BLOCKS

Mixture	Size	Weight	No. of Blocks in 100 sq. ft. of Wall	No. of Brick Replaced by One Block	Cost of Cement at $1.50 bbl. sq. ft. Wall	Cost of Sand and Gravel per sq. ft. Wall	Cost of Labor 2 men, $5 per day, 10 hrs. per sq. ft.	Cost of Blocks Cement, Sand and Gravel, Labor per sq. ft. of Wall
ONE-PIECE CEMENT BLOCKS								
1 Cement 2 Sand 3 Small Gravel	8 in. High 8 in. Wide 24 in. Long Sq. ft. of Wall Surface 1⅓	58 lbs. per sq. ft.	75	8 in. Wall 20 12 in. Wall 30 16 in. Wall 40	.035c	.0235c	.023c	.0815c
SYNSTONE								
1 Cement 2½ Sand and Small Gravel 4 Large Gravel 1 in. Screen	12 in. High 8 in. Wide 24 in. Long Sq. ft. of Wall Surface 2	50 lbs. per sq. ft.	50	8 in. Wall 30 12 in. Wall 46 16 in. Wall 60	.022c	.0171c	.0085c	.0535c
% IN FAVOR OF SYNSTONE	50%	16%	50%	50%	40%	37.5%	170%	57.5%

Cement figured at $1.50 per barrel net. Sand and Gravel $1.00 per cubic yard. Labor $2.50 per day, 10 hours.
Labor cost based on 2 men doing their own mixing by hand at average price of labor in smaller cities and towns.

Comparative Table of Laying Wall

Synstone vs. Brick

Average construction per day, Mason and Helpers, is 200 to 500 square feet of Synstone.

Each block of Synstone is equal to 30 bricks in an 8-inch wall, 46 bricks in a 12-inch wall, and 60 bricks in a 16-inch wall. Thus laying 200 to 500 square feet of Synstone per day is equivalent to

6,000 to 15,000 bricks in an 8″ wall
or 9,200 to 23,000 bricks in a 12″ wall
or 12,000 to 30,000 bricks in a 16″ wall

A Mason and Helpers actually lay an average of only 300 faced bricks or 1,500 common bricks per day.

■ ■ ■ ■

Other Synstone Walls

Our Machinery Makes All of the Walls Shown Herein, and All of the Different Shapes and Sizes of Blocks Required for Them

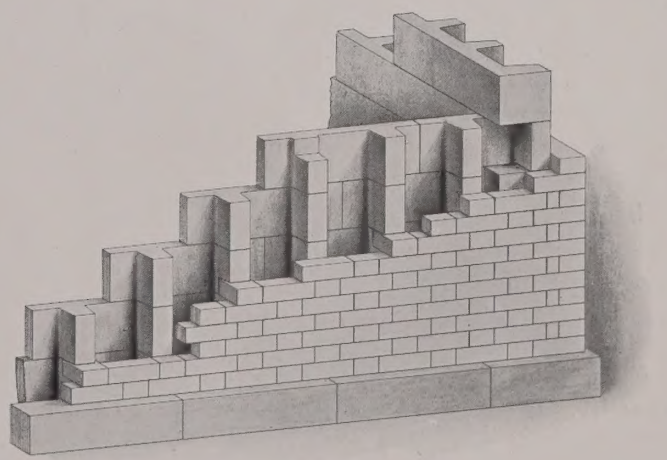
The Synstone Inner Wall With a Brick Veneer

Bonded with header bond, for those who prefer a brick facing; impervious to heat and cold; reduces coal bills 33⅓%, and is a dry wall; shows a large saving in cost over solid brick construction.

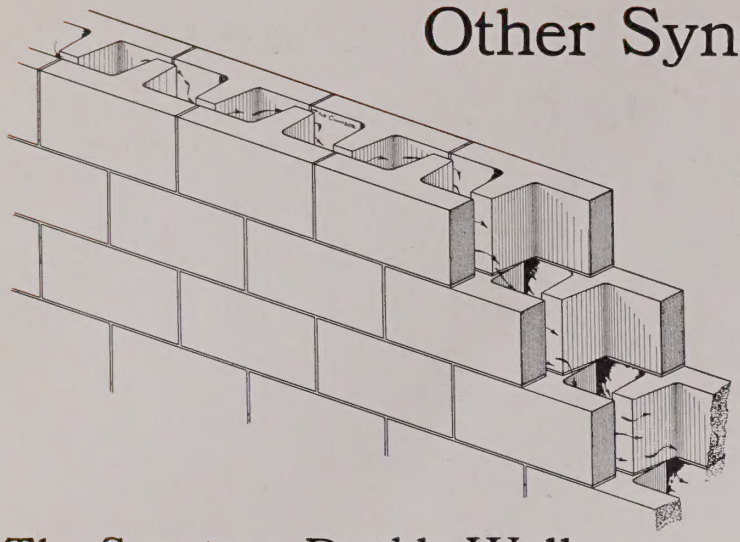
Fifty blocks (100 sq. ft.) made per hour and laid in one-third the time required for equivalent brick wall.

Cost per square foot of inner wall 9 4/10 cents, ready for plastering.

12½ or 16½ inches in thickness.



Other Synstone Walls (Concluded)

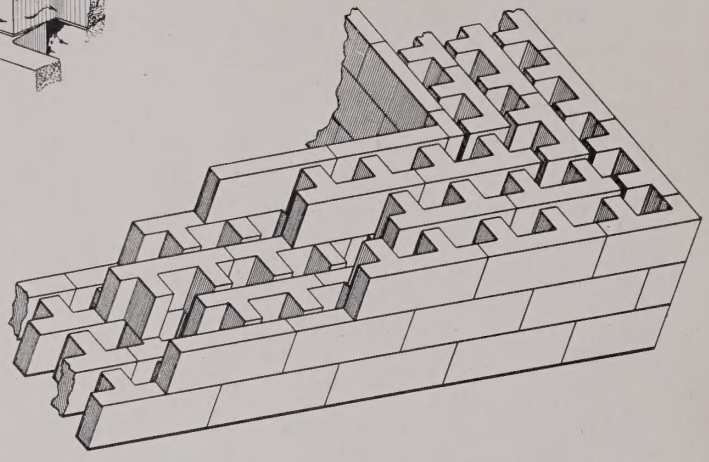


The Synstone Double Wall

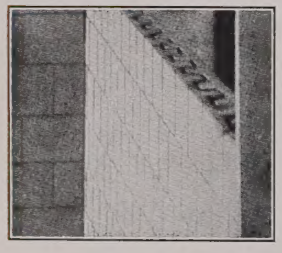
For heavy construction 50 blocks, 50 sq. ft. of wall per hour, 11 to 18 inches in thickness.

The Synstone Multiple Air Space Wall

The Synstone Multiple Air Space Wall, made any thickness required from 19½″ to five or more feet. Ideal construction for cold storage or packing plants, where dead air chambers are required; each section may be sealed. Especially suitable for unusually heavy construction or wide retaining walls. Fifty blocks, 100 sq. ft., made per hour.



The Synstone Double Partition Wall

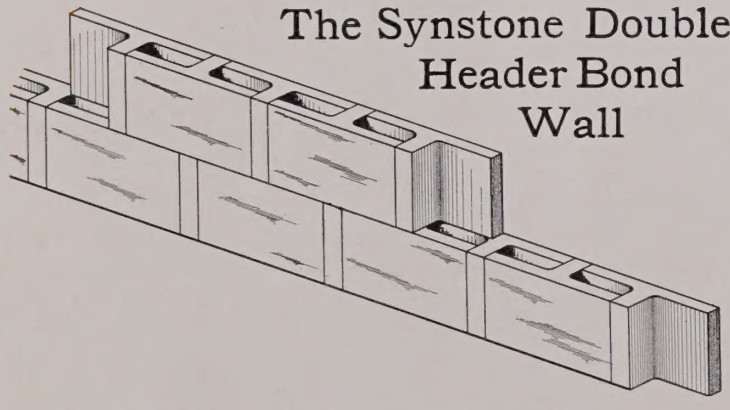


50 blocks, 50 sq. ft., made per hour.

A partition wall from 4½″ up in thickness that is sound-proof.

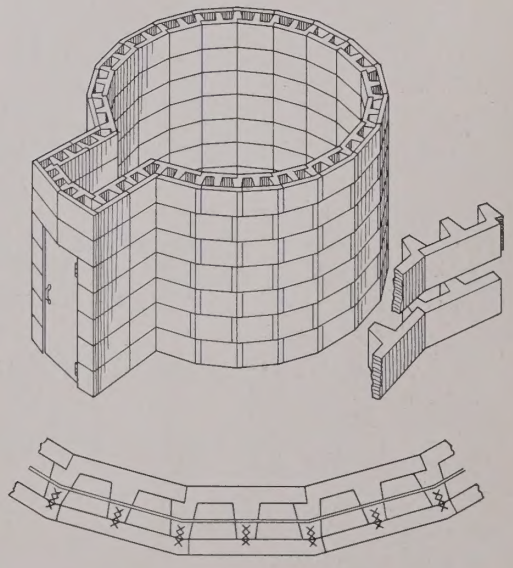
One or both sides may be faced, requiring no plaster.

The Synstone Double Header Bond Wall



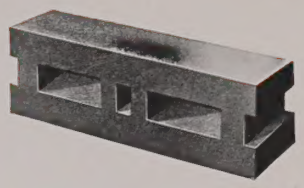
The Synstone double header bond wall, for partitions or heavy construction, the strongest masonry wall that can be constructed from 3″ to 12″ in thickness.

The Synstone Silo Construction



The Synstone Silo Construction, costing about one-half that of other good construction.

Your Competition in Other Systems of Concrete Block Manufacture



THEY all have their place and to a great extent have served to reduce the cost of home building.

The one-piece cement block with interior holes, if immediately removed from the mold, must be made of a mixture consisting of cement, sand and a **VERY SMALL GRAVEL** or broken stone. This mixture cannot be made wet, otherwise the block would slough down when the cores are pulled; the mixture **CAN ONLY BE DAMP.** For the same reason a coarse aggregate cannot be used, and a large proportion of cement is necessary, at least a 1 to 4 mixture. Cement obtains its initial set within thirty minutes of the time water is supplied. Such blocks cannot be given water sufficient to cause proper crystallization until after the initial set has occurred, consequently a great proportion of the strength of the cement has been lost through lack of sufficient water. The result is a block that is weak and very porous. Such a block will not stand a crushing weight of over 1,300 pounds per square inch at best, and usually they are broken under half that amount of pressure. You may pour a bucket full of water on to such a block and it will be absorbed immediately and capillary attraction carries the moisture through the wall. Such a wall must be furred and plastered and will be wet for days after every storm. The wall is neither strong, sanitary or satisfactory as to appearance. These are facts known to all cement workers. A 1 to 10 mixture of coarse aggregates, made wet, would produce a block about three times as strong as the one above described.

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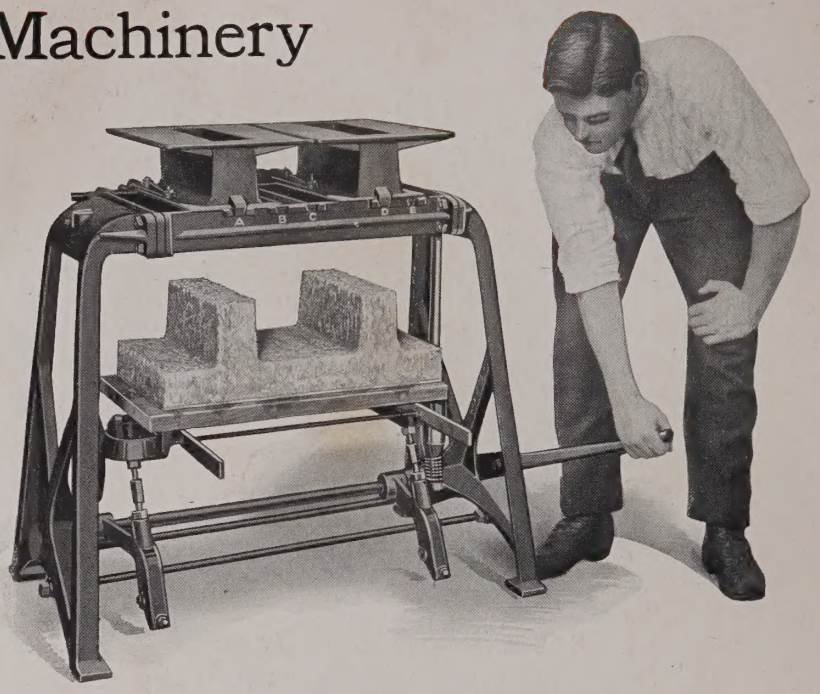
Heavy Pressure Process Machinery

MR. **FERGUSON** spent over $100,000 on machinery designers and in building up and tearing down machines produced by them, with a view of applying from 100,000 to 150,000 pounds pressure on concrete blocks, on the theory that to make a really good concrete block it had to be made under heavy pressure. Until April, 1916, Mr. Ferguson owned, having previously invented, the "Double End" heavy pressure machines, applying 100,000 pounds, and also controlled and perfected what is known as the "White" machine for applying 150,000 pounds pressure. These two machines, costing as they do, $700 to $800 for each set, cover all that has been devised in the way of practical heavy pressure machinery for making concrete units; and in disposing of these machinery patents and rights it was done with the full knowledge that heavy pressure in connection with wet concrete is not essential but is, to a certain extent, injurious to the block.

Scientific investigation has shown when 100,000 pounds pressure is applied and then released an expansion occurs which, to a certain extent, loosens the concrete aggregate to the detriment of the mixture. If the mixture is as wet as it should be (quaky) and properly proportioned, slight tamping will consolidate it. **A MILLION POUNDS PRESSURE WOULD BE NO MORE EFFECTIVE UPON SUCH A MIXTURE THAT HAD BEEN CONSOLIDATED BY TAMPING THAN WOULD THAT AMOUNT OF PRESSURE BE UPON COMPRESSING WATER.** Sufficient tamping evenly distributes the fine aggregates and puts them where they belong to fill the voids. **TAMPING ALSO AVOIDS THE DIFFICULTY EXPERIENCED IN HEAVY PRESSURE MACHINERY WHERE THE MOULDS HAVE BEEN UNEVENLY FILLED, THUS CAUSING AN UNEVEN DISTRIBUTION OF PRESSURE WHICH PRODUCES A WEAK BLOCK IN SPOTS.**

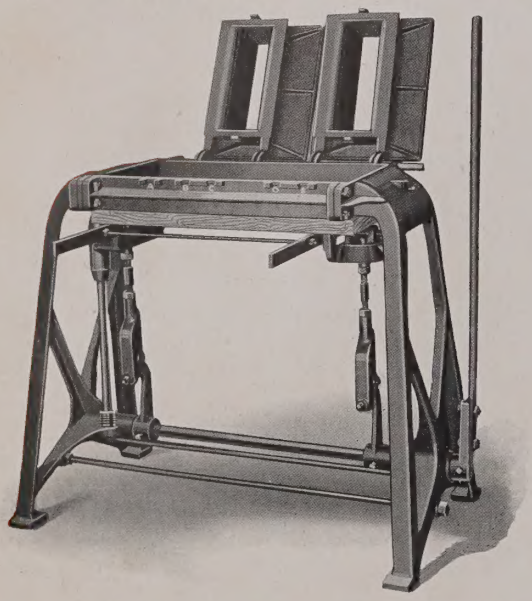
One-piece cement blocks made by the poured process, where the blocks are allowed to remain in the mold for 24 hours, produces good concrete, but the cost for equipment of molds to turn out a product in a day equal to that of one Synstone machine would amount to over $2,500 **(AS AGAINST $287.50 FOR SYNSTONE MACHINERY).** No better concrete, however is made by this process than that produced by the Synstone machine. **NO BETTER CONCRETE CAN BE MADE BY ANY PROCESS.**

Synstone Machinery



SYNSTONE machinery is very carefully made, and thoroughly complete in every detail, making all of these walls, and all of the different shapes and sizes of blocks required for them, by simply changing the cores, which is done in about thirty seconds. The capacity of the machine is 50 blocks (100 sq. ft.) per hour. We supply all that is needed in the way of equipment except wood pallets (13″ x 26″) one of which is required for each block made during twenty-four hours; and for fine faced work galvanized tins (No. 26 gauge) are required of the same size for each faced block made during twenty-four hours. These usually cost, locally, about twenty cents each, or $20.00 for pallets and tins for each 100 square feet of wall per twenty-four hours.

The machinery is operated by common labor, one, two or three men. Two experienced men with a third man mixing will make 50 blocks (100 sq. ft. of single wall or 50 sq. ft. of double wall) per hour. In the single wall this is equal to 900 sq. ft. of wall in a nine-hour day.

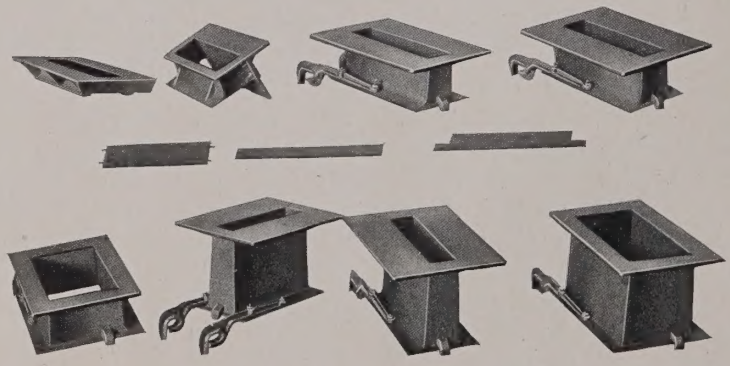


In other words, two men operating a Synstone machine will produce the blocks for an average sized residence in about 2½ days, which product, if maintained for 300 working days in the year, and sold or used at cost ($4\frac{4}{10}$ cents per sq. ft.) plus 100% profit ($4\frac{4}{10}$ c) making a selling price of $8\frac{8}{10}$ c per sq. ft., would amount to $11,880 per annum in profit on each machine. All of this

With an Investment of Only $287.50 for Complete Machinery to Make All the Different Synstone Walls Illustrated in This Catalog

This price covers a fair manufacturing profit on machinery and an allowance for advertising. No charge whatever is made for royalty in connection with the use of these walls. We are aware that a much larger price could be obtained for this machinery and manufacturing rights under our patents, but if this low price will be the means of producing a building material to be used throughout the world, the result of which will materially cut the cost of good, sanitary homes and buildings and place them within the reach of those who have heretofore been unable to afford them, we shall feel satisfied.

No deviation will be made from this price. The walls shown in this catalog do not infringe any other patents, and we will prosecute anyone infringing our patents. The rights to all large cities are reserved for our own manufacturing plants.



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